

**City of San Diego  
Engineering and Development Department  
Traffic and Engineering Division**

**REVISED RECOMMENDED WEEKDAY TRIP GENERATION RATES SUMMARY  
(Vehicle Trips)**

LAND USE	DRIVEWAY RATES <sup>1</sup>	CUMULATIVE IMPACT RATES <sup>1</sup>	
	All Communities	Older Urbanized Communities <sup>2</sup>	Suburban Communities <sup>2</sup>
<b>Residential</b>			
Multifamily Unit (over 30 DU/acre)	6 trips/DU <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Multifamily Unit (under 30 DU/acre)	8 trips/DU <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Single-Family Dwellings (suburban area)	10 trips/DU <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Single-Family Dwellings (urbanized area)	9 trips/DU <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Retirement/Senior Citizen Housing	4.5 trips/DU <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Mobile Homes	5.5 trips/DU <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
<b>Commercial</b>			
Regional Shopping Center:			
Over 1,250,000 SF	30 trips/1,000 SF <sup>4,5</sup>	24 trips/1,000 SF	25 trips/1,000 SF
1,000,000 to 1,249,999 SF	35 trips/1,000 SF <sup>3,4</sup>	28 trips/1,000 SF	30 trips/1,000 SF
500,000 to 999,999 SF	38 trips/1,000 SF <sup>3</sup>	30 trips/1,000 SF	32 trips/1,000 SF
225,000 to 499,999 SF	60 trips/1,000 SF <sup>3</sup>	48 trips/1,000 SF	51 trips/1,000 SF
Community Shopping Center	70 trips/1,000 SF <sup>3</sup> (700 trips/acre) <sup>3</sup>	35 trips/1,000 SF (350 trips/acre)	49 trips/1,000 SF (490 trips/acre)
Neighborhood Shopping Center	120 trips/1,000 SF <sup>3</sup> (1,200 trips/acre) <sup>3</sup>	60 trips/1,000 SF (600 trips/acre)	60 trips/1,000 SF (600 trips/acre)
Grocery Store	150 trips/1,000 SF <sup>3,4</sup>	Same as driveway rates.	Same as driveway rates.
Convenience Store	430 trips/1,000 SF <sup>4</sup> (3,600 trips/acre) <sup>2</sup>	Same as driveway rates.	Same as driveway rates.
Freestanding Retail/Strip Commercial	40 trips/1,000 SF <sup>4</sup> (400 trips/acre) <sup>1</sup>	40 trips/1,000 SF (400 trips/acre)	40 trips/1,000 SF (400 trips/acre)
Discount Store	70 trips/1,000 SF <sup>5</sup>	Same as driveway rates.	Same as driveway rates.
Lumber/Home Improvement Store	30 trips/1,000 SF <sup>6</sup>	Same as driveway rates.	Same as driveway rates.
Furniture Store	6 trips/1,000 SF <sup>6</sup>	Same as driveway rates.	Same as driveway rates.

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LAND USE	DRIVEWAY RATES <sup>1</sup>	CUMULATIVE IMPACT RATES <sup>1</sup>	
	All Communities	Older Urbanized Communities <sup>2</sup>	Suburban Communities <sup>2</sup>
<b>Restaurants</b>			
Quality Restaurant (low turnover)	100 trips/1,000 SF <sup>3,6,12</sup>	Same as driveway rates.	Same as driveway rates.
Sit-down Restaurant (medium turnover)	200 trips/1,000 SF <sup>3,12</sup>	40 trips/1,000 SF (400 trips/acre)	Same as driveway rates.
Sit-down Restaurant (high turnover)	370 trips/1,000 SF <sup>3,5,12</sup>	Same as driveway rates.	Same as driveway rates.
Fast-food Restaurant (low turnover)	770 trips/1,000 SF <sup>3,5,12</sup>	Same as driveway rates.	Same as driveway rates.
<b>Offices</b>			
Large Commercial Office (> 100,000 SF) <sup>9</sup>	16 trips/1,000 SF <sup>3</sup> (600 trips/acre) <sup>1</sup>	Same as driveway rates.	Same as driveway rates.
Small Commercial Office (< 100,000 SF) <sup>10</sup>	20 trips/1,000 SF <sup>1</sup> (300 trips/acre) <sup>1</sup>	Same as driveway rates.	Same as driveway rates.
Government Office (ex. DMV/Post Office)	40 trips/1,000 SF <sup>6</sup>	16 trips/1,000 SF for uses >100,000 SF	16 trips/1,000 SF for uses >100,000 SF
Library	46 trips/1,000 SF <sup>6</sup>	20 trips/1,000 SF for uses <100,000 SF	20 trips/1,000 SF for uses <100,000 SF
Department of Motor Vehicles	170 trips/1,000 SF <sup>6</sup>	Same as driveway rates.	Same as driveway rates.
Post Office	140 trips/1,000 SF <sup>6</sup>	Same as driveway rates.	Same as driveway rates.
Medical Office	90 trips/1,000 SF <sup>3</sup> (800 trips/acre) <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
<b>Visitor Serving Commercial</b>			
Hotel/Motel	8 trips/room <sup>3,5,6,11</sup>	Same as driveway rates.	Same as driveway rates.
Tourist Commercial/Commercial Recreation	150-500 trips/acre <sup>3,8</sup>	Same as driveway rates.	Same as driveway rates.
<b>Auto Serving Commercial</b>			
Car Dealer	58 trips/1,000 SF <sup>3</sup> (400 trips/acre) <sup>3</sup>	40 trips/1,000 SF <sup>11</sup> (400 trips/acre) <sup>11</sup>	40 trips/1,000 SF <sup>11</sup> (400 trips/acre) <sup>11</sup>
Gasoline Service Station	130 trips/1,000 SF <sup>7</sup> (750 trips/acre)	- 0 -	- 0 -
<b>Financial Institutions</b>			
Saving and Loan	74 trips/1,000 SF <sup>5,6,12</sup>	Same as driveway rates.	Same as driveway rates.
Bank (excluding drive-thru lanes)	200 trips/1,000 SF <sup>3,6,12</sup>	40 trips/1,000 SF <sup>11</sup> (400 trips/acre)	40 trips/1,000 SF <sup>11</sup> (400 trips/acre) <sup>11</sup>
Bank (drive-thru lanes only)	260 trips/lane <sup>3,12</sup>	Same as driveway rates.	Same as driveway rates.

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	All Communities	Older Urbanized Communities <sup>2</sup>	Suburban Communities <sup>2</sup>
<b>Cemetery</b>	5 trips/acre <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
<b>Airports</b>			
General Aviation Airport	2 trips/average daily flight <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
<b>Industrial</b>			
Large Industrial <sup>9</sup>	8 trips/1,000 SF <sup>3</sup> (100 trips/acre)	Same as driveway rates.	Same as driveway rates.
Small Industrial <sup>10</sup>	14 trips/1,000 SF <sup>3</sup> (130 trips/acre)	Same as driveway rates.	Same as driveway rates.
Large Industrial/Business Park <sup>9</sup>	12 trips/1,000 SF <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Small Industrial/Business Park <sup>10</sup>	18 trips/1,000 SF <sup>3</sup> (200 trips/acre) <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Scientific Research and Development <sup>10</sup>	8 trips/1,000 SF <sup>3</sup> (85 trips/acre) <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Warehousing	5 trips/1,000 SF <sup>5</sup> (80 trips/acre) <sup>6</sup>	Same as driveway rates.	Same as driveway rates.
Corporate Headquarters	9 trips/1,000 SF <sup>3</sup> (149 trips/acre) <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Rental Storage	2 trips/100 SF <sup>3</sup> (0.2 trips/storage vault) <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Truck Terminal	60 trips/acre	Same as driveway rates.	Same as driveway rates.
<b>Institutional</b>			
House of Worship (Church or Synagogue)	60 trips/acre <sup>6</sup> (300 trips/each) <sup>6</sup>	Same as driveway rates.	Same as driveway rates.
Military Base	2.5 trips/military/civilian employee	Same as driveway rates.	Same as driveway rates.
Hospital	20 trips/bed <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Convalescent Hospital	3 trips/bed <sup>4</sup>	Same as driveway rates.	Same as driveway rates.
<b>Educational</b>			
Four-year University or College	2.8 trips/student <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Two-year College (Junior College)	1.5 trips/student <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
High School (Secondary School)	1.5 trips/student <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Junior High School (Middle School)	1.0 trips/student <sup>3,4</sup>	Same as driveway rates.	Same as driveway rates.
Elementary School (Grade School)	1.4 trips/student <sup>3</sup>	Same as driveway rates.	Same as driveway rates.

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	All Communities	Older Urbanized Communities <sup>2</sup>	Suburban Communities <sup>2</sup>
<b>Recreational</b>			
Park (undeveloped)	5 trips/acre <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Park (developed)	40 trips/acre <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Golf Course	6 trips/acre <sup>6</sup>	Same as driveway rates.	Same as driveway rates.
Bay and Ocean Beaches/Park	1000 trips/1000 feet shore <sup>3</sup> (70 trips/acre)	Same as driveway rates.	Same as driveway rates.
Lake (with boating)	50 trips/1000 feet shore <sup>3</sup> (6 trips/acre)	Same as driveway rates.	Same as driveway rates.
Zoo or Sea Life Park	100 trips/acre <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Marina	4 trips/berth <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Sports Facility	1 trip/attendee <sup>3</sup> (42 trips/acre) <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Racquetball/Tennis/Health Club	40 trips/court <sup>3</sup> (45 trips/1,000 SF) <sup>3</sup>	Same as driveway rates.	Same as driveway rates.
Theaters	1.8 trips/seat (800 trips/acre)	Same as driveway rates.	Same as driveway rates.

- (1) "Driveway rates" apply when the effect of passerby trips is irrelevant such as when the project entrance (and any distance beyond per the Transportation and Traffic Engineering Division) are being analyzed. This may result with either a manual, non-computerized study or a computerized study (see DI). Use of the driveway rates for project-specific impacts near its entrance does not necessarily preclude the use of the cumulative trip rates for analyzing the effects on the community street system. Guidance can be obtained from the Transportation and Traffic Engineering Division staff in each situation.
- (2) See "List of Older Urbanized Communities and Suburban Communities for Trip Generation Responses." Also see "Figure of Suburban Communities for Trip Generations."
- (3) SANDAG/Caltrans, San Diego Traffic Generators (1971–1986, including studies not yet published).
- (4) Arizona Department of Transportation, Trip Generation Intensity Factors (1/1/79 version).
- (5) I.T.E., Trip Generation (1982).
- (6) Caltrans District 4, Trip Ends Generation Research Counts (1975-1982).
- (7) COMSIS, Quick Response Urban Travel Estimation Techniques and Transferable Parameters, NCHRP Report #187 (1978)
- (8) A range is shown due to the wide variety of land uses associated with this category. See the "Definitions of Land Use Categories for Trip Generation Purposes" for additional information.
- (9) "Large" is applicable where buildings are over 100,000 SF or where parcels are over 8 acres in size.
- (10) "Small" is applicable where buildings are under 100,000 SF or where parcels are under 8 acres in size.
- (11) Included in hotel/motel trip generation rates is a citywide vacancy rate of 24.6 percent.
- (12) The restaurants and financial institutions rates shown apply to freestanding facilities only. If any of these uses are part of a larger project (e.g., an office building or a shopping center) they would have the same rate as the larger project has.